

Date: Thu, 16 Sep 93 11:36:33 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1100
To: Info-Hams

Info-Hams Digest Thu, 16 Sep 93 Volume 93 : Issue 1100

Today's Topics:

 Is This SAFE?
 need expert info on nicads.
 Neighborhood watch groups

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 15 Sep 93 20:57:22 GMT
From: ogicse!emory!wa4mei!ke4zv!gary@network.ucsd.edu
Subject: Is This SAFE?
To: info-hams@ucsd.edu

In article <2249@arrl.org> bbattles@arrl.org (Brian Battles WS10) writes:
>In rec.radio.amateur.misc, B10990@ANLVM.CTD.ANL.GOV writes:
>
>>I managed to lose the original post, but it was in re to whether it's
>>safe to purchase a home near what appears to be a microwave tower...
>>... From a health concern standpoint, I'd have no qualms about living
>>there. I would be concerned about the effect on the property value, however.
>
>Gary,
>
> Tsk-tsk...shame on you! This is just what most nosy crybaby nonham goobers
>(whom we serve voluntarily and at our own expense in emergencies and otherwise)
>whine about when they attempt to block amateurs from erecting antennas and
>towers on their OWN property. I find a tall radio tower to be a sculpture of
>unparalleled architectural beauty!

Oh, don't get me wrong, I'd get over my reluctance in a second if they'd agree to share tower space with me. :-)

I'd also ruthlessly and unscrupulously use the tower as an excuse to beat down the price on the property. Then I wouldn't worry about the deflation of property value since I'd already taken advantage of it. I wouldn't pay a premium for the property in expectation of recouping it at a later date though. That would be ignoring reality.

Gary

--

Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

Date: 15 Sep 93 22:40:24 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: need expert info on nicads.
To: info-hams@ucsd.edu

In article <CDDADu.3qF@cnsnews.Colorado.EDU> fingersh@ucsu.Colorado.EDU (FINGERSH LEE JAY) writes:

>

>Over charging is not a problem at all as long as it is at less than c/10
>charge rate. 600mAh battery - charge forever at < 60mA. However, if you
>charge faster than that, overcharge will cause over-heating, venting, and
>in extreme cases, explosion.

This isn't always safe advice. I had a battery rupture that was on a 45 ma trickle for a year. Overnight is probably fine, but forever is a bit too long to keep a Nicad charging. Even at 45 ma they do eventually dry out and fail. I've had HT packs sitting in the trickle charger for a couple of weeks that didn't have any capacity when I tried to use them. And they were relatively new packs too. Unlike lead acid cells which will quickly die if not kept charged, Nicads are best stored discharged. If stored charged, they usually lose about 10% of their charge per month. I wouldn't trickle at a higher rate than that if I were going to leave them on charge forever. Note that that's not C/10, that's C/720. Any time you overcharge a Nicad, you cause outgassing, however slight, and prolonged overcharging, even at a trickle rate, will damage the battery.

Gary

--

Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

Date: 15 Sep 93 22:08:07 GMT
From: ogicse!uwm.edu!biosci!shibumi@network.ucsd.edu
Subject: Neighborhood watch groups
To: info-hams@ucsd.edu

randy@cyphyn.radnet.com (Randy) writes:

> I saw (heard) a group in my area^trying to do the same thing.... and they
> had their problems... resolved by setting up relay stations to relay any
> NEEDED info up & down the line.
> Everyone learned just what their range was, and made sure to not get out
> of range....passed along any watching to the next person who'd likely be
> next to see the 'suspect'.
> The Equip. involved HT's (all kinds) and Car sets, and a few Home sets.
> and was done on 4 simplex freqs.

Our group has two modes:

patrol mode, where we use a base with good coverage of the area (i.e. a good antenna on top of a building) working thru a repeater (since our patrol area covers about 38 sq. blocks), but where the base can hit all of the patrol units on simplex;

event mode, where all portable units are running simple and an event base is able to hear and hit all units (and usually all of the portable units can hear/hit each other).

A radio base is a really important thing. It lets patrollers in the field do what they have to do -- patrol -- and makes the base responsible for relaying messages between teams (except in tactical situations) and getting hold of the police when they are needed (which can also be quite time consuming). The base also keeps a running log of all reports from patrols which is useful for both analyzing how the patrols are working and CYA if something bad happens and people start shooting lawyers at each other. We've used this scheme to manage up to five different patrol teams at once, using base operators with little or no training, at events with tens of thousands of attendees, where we were providing event security and first response aid services. And it worked quite well for what we have to do.

We do not use amateur frequencies but the operational principles are the same. A good reason not to use amateur frequencies is that you have no protection if a local news organization wants to feature your group's latest

expolits on the evening news (as in, you did something wrong and they are going to play the transcripts). Also, in a chase, patrollers can, uh, use harsh language, and thats a problem you also don't need on the amateur band (such language is not legal on any other band either, but you're less likely to have to deal with the opinions of the amateur lawyers).

> Prior to a nite of watch, they'd tell PD who was going to where/cars etc,
>so PD would know they weren't someone out to make trouble.

Actually, the reason to let the PD know is to get a 'fast' line thru the dispatch system. You can get hung up for a long time on 911 when being able to call the district station desk can get you instatn response. The field officers are either going to appreciate you or think you're an amatuer trying to steal their job -- and there is little you can do about that.

>PROBLEM! N O W adays...with 'stalking' laws....such watch groups could
>be viewed as a form of stalking!
>So...they'd want to check with the PD on all those issues 1st, before they
>start spending money on rigs that might be spent on another band...

The way that you solve this problem is to have uniforms. Doesn't have to be much, just a colored hat and/or a T-shirt with "Everytown, USA Community Citizens Patrol" on it. And everybody in the patrol wears them. The truth is that if you don't have some sort of *visible* presence, the whole community patrol idea doesn't work. 'Take a bite out of crime' signs are all well and good, but the florescent green hats and shirts of the Haight-Ashbury RAD group have made much more impact. And no one thinks of them as 'stalkers' -- except perhaps the mutants.

Kenton A. Hoover
Deputy Director of Operations (acting)
San Francisco Street Patrol
KC6SST / KAE9193

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=====	

Date: 14 Sep 93 17:15:36 GMT
From: ddsww1!indep1!clifto@uunet.uu.net
To: info-hams@ucsd.edu

References <VBREAUULT.93Sep8114939@rinhp750.gmr.com>, <2468@indep1.UUCP>,
<VBREAUULT.93Sep13092739@rinhp750.gmr.com>
Subject : Re: Radio Shack is people, too.

In article <VBREault.93Sep13092739@rinhp750.gmr.com> vbreault@rinhp750.gmr.com (Val Breault) writes:

>In article <2468@indep1.UUCP> clifto@indep1.UUCP (Cliff Sharp) writes:

> There is now a codeless technician license. This is probably due at least
> in part to the fact that Ed Juge, W5T00, Radio Shack bigwig in charge of
> finding new markets and filling their needs, was on the committee which
> recommended the codeless technician license. (Wonder how he voted? :-)
>

>hf, I still think that the codeless technician license is a great way
>for folks to get into amateur radio. The fact that Radio Shack (or
>Icom or Kenwood or Yaesu....) can profit from that change is irrelevant.

But the fact that two of the committee members had a conflict of interest here (i.e., high-level people with an interest in selling mass quantities of ham gear) is not irrelevant. You make it sound as though you believe that the end justifies the means.

I don't give a good rip if Ed Juge believed in no-code since he was knee-high to a dandelion; if he's influential in marketing in a huge organization with a vested financial interest in seeing the no-code proposal go through, it's a conflict of interest. The least he could have done would have been to decline, but recommend someone else he knew who supported the proposal but had no vested interests elsewhere; I'm sure he'd have been influential enough to get that person on the committee.

>I'm encouraged to learn that there is a ham that works for a mass marketer
>who is in a position to fill the needs of the amateur radio community.

He helped MAKE that need before he filled it. It's possible that he helped make that need just so he COULD fill it.

To me, it's no different than having defense contractors on the Congressional committees that set military budgets.

>I've heard reports that other mass marketers may be selling 2 meter radios.
>I wonder if any of their purchasing or marketing people are active hams?

One poster here said that J.C. Penney is showing one in their Christmas Wishbook. But they weren't on the committee for no-code. Having spotted an already-existing need, they're selling goods to fill the need. Not the same at all; they didn't help to CREATE the need.

They have no reason at all not to try to get into that market, now that it exists_. Had they been insiders trying to create the market in the first place, it would have been quite different.

>(It's not obvious from his callsign, but Ed Judge W5T00 holds an
> amateur extra class license.)

And a high-paying job at the top of the totem pole at a major electronics

marketer. That gets him bonuses for increased sales. Every time you sell an HTX-202 or HTX-404, you're putting money in his Christmas stocking...

...which would be fine if he hadn't been wearing that stocking during meetings of the committee that decided the no-code issue.

--

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+-----+
|  Cliff Sharp  |      clifto@indep1.chi.il.us   OR  clifto@indep1.uucp   |
|   WA9PDM     |                        Use whichever one works          |
+-----+
```

Date: 15 Sep 93 22:27:27 GMT

From: ogicse!emory!rsiatl!ke4zv!gary@network.ucsd.edu

To: info-hams@ucsd.edu

References <!cbztcq@dixie.com>, <1993Sep14.160544.29507@ke4zv.atl.ga.us>,
<steveWCDEIAK.MKs@netcom.com>

Reply-To : gary@ke4zv.UUCP (Gary Coffman)

Subject : Re: Emergency: cellular vs ham (was Re: Yagi for Cellular Phone?)

In article <steveWCDEIAK.MKs@netcom.com> steve@netcom.com (Steven Wilson) writes:
>In article <1993Sep14.160544.29507@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>> The second point is related to the first in a way. While consumer
>> technology has advanced rapidly, amateurs have by and large tended
>> to cling to outmoded techniques, and to increasingly rely on the
>> same consumer companies to supply their black boxes. Because the
>> amateur community has resisted change, both informally, and formally
>> through their input into the licensing regulations, those black boxes
>> have increasingly fallen behind the state of the art in communications
>> technique. Communications has increasingly become a cooperative
>> venture. From cellular systems to in-car terminals, the emphasis
>> has turned strongly toward actively cooperative networks of systems.
>> Yet amateurs continue to operate under a paradigm of competition
>> rather than cooperation. This shows in our inability to establish
>> stable communications networks at the local, state, or national
>> level. Our interoperability with agency systems is still very
>> firmly in the manual yellow pad stage. That puts us more and
>> more into the irrelevant category.

>

>This is only partially true. Where it is easy to find splinter
>repeater groups (or PRIVATE machines) in every area it also possible
>to find cooperative efforts. Two local efforts come to mind to
>prove the point. In my local area we tend to have ARES support
>organizations that organize to provide an infrastructure that ARES
>uses to accomplish their mission. There isn't one of these but
>several accross the different areas of the bay. I'm going to

>pick on one in particular that I'm most familiar with. The SVECS
>group supports a repeater that is the primary county organizing channel
>during an emergency. We use it for what is called a resource
>net employed in advertising the situation and lining up volunteers
>and equipment for the event we are trying to staff. OK, that is
>how the system is employed, now let me speak a bit about SVECS. This
>is a group of people that contribute money, get together 4 times a year
>at a breakfast and support a technical committee that takes care
>of the repeater...so far nothing unusual about that. Let's take it
>a bit farther. The members of SVECS consist of folks from multiple
>ARES jurisdictions? We are organized along city boundaries here so
>there is an EC for each city and a corresponding ARES group for the
>city. So here is a group of folks that have gotten together socially
>and financially but are supplying a support system yet they go beyond
>their local turf situation. The other interesting thing about SVECS
>is that it is run in sort of a benign dictatorship mode. The existing
>board of directors has sat there for alot of years with no real
>move to change em, or anyone wanting too. Lastly, when any ARES
>group wants to use the machine...they do...no asking...no clearing
>it with the power brokers of the repeater...they just use it. That
>is what makes it such a joy to be a member of the group, essentially
>no politics!

Well that's good, but a simple repeater system isn't what I meant
when I talked about modern cooperative communications systems.
We have several wide coverage machines here in the Atlanta area
that are always available for emergency use. The North Fulton
machine that John made fun of is one. (It really does sound like
something from Star Wars, but that's another story.) The
Bell Pioneer machine is another wide area system that's always
available for emergencies and public service events. The Pioneers
are very aggressively into public service. They host a major
packet node and traffic BBS system. They have a well equipped
communications trailer. Etc. And of course there are the mainline
clubs like the Atlanta Radio Club and the Stone Mountain club.
Both support emergency services, though both are currently
plagued with technical problems. And there's GARS, a very
public service oriented suburban group. Even my little KE4ZV
machine has a 500 kW backup diesel generator, 1500 gallons of
onsite fuel, and good coverage from it's 1000 foot tower in case
the balloon goes up. :-)

There are more, but I'd slight somebody if I tried to name
them all. It's sufficient to say that closed machines that
don't welcome emergency service are definitely *not* the
norm here. I know of only 2 really closed machines, and
neither gets out of it's backyard effectively.

But none of this is linked with ARES. In fact ARES eventually got chased off the North Fulton machine as a place to conduct their drills, though they're still welcome for real operations. That's a personality problem with the ARES leaders pure and simple.

>The other example that comes to mind are the various long-hall linking
>systems in place in CA. We have at least 3 systems I can think of
>that provide VHF/UHF linking up and down CA. (That is like linking
>Philly with Miami!) There are numerous repeater groups who have
>gotten together to make this happen. So there are successful
>cooperative groups in amateur radio. There is hope!

Well we have the Big Shanty system with links from Atlanta to Chattanooga (and beyond I think), and another linking group that routinely ties a network together from Nashville to Jacksonville with stops in Alabama. But it's all very ad hoc and iffy. There are no systems in place to use it effectively. No formal tie ins with ARES. In fact I'd say the ARES leadership probably isn't even aware the systems exist. More importantly, there are no trunked systems, there are no systems that can link into agency communications in time of need. There are no zoned or cellular systems. It's all 30 year old FM voice technology, mostly using 30 year old surplus commercial radios. You can't grab a radio at the State Emergency Management Center and have an automatic linkup with the EC in Rome. Athens is off the map. And if you need to contact the coast, or places below the gnat line, better hope Ma Bell is working.

>> It's true that many amateurs have mastered the art of soldering
>> a connector, and some even know which end of a beam is the front,
>> but how many can quickly set up an ad hoc interface between an
>> agency communications system and an amateur system? How many
>> can quickly and accurately solve a network problem for an agency?
>> How many can even quickly adapt to an agency's operating protocols?
>> How many can discard their normal amateur competitive training and
>> adopt a cooperative approach? As agency support personnel, our
>> job is to fit seamlessly and transparently our communications
>> assets into the agency's systems. How many even know what their
>> local agency's systems are? How many even know what it means to
>> operate over a trunked communications system?

>

>Boy you walked into this time ;-) I can easily say just about
>ANY member of my local group and a fair precentage of the local
>amateurs can do any of the above at the expert level...whoops...
>but then I live in Sillicon Valley ;-)

>

>Let me propose an alternative question... within most groups
>is there a resevoir of such talent? Can someone in your
>area that you can call handle an ethernet question, or knows
>how to use a computer beyond just an elementary level?

>That is a serious question to think about. I can take the answer
>to the above for granted...but someone located in the middle of
>Nebraska farm country probably can't.

Well we can take the answer for a given here too. At least among
the members of my group and others here in Silicon Valley East.
But that's not the kind of network I meant. Our local police
systems are 800 MHz trunked systems, data and voice, with
microwave links and computer supervision. I can only name *one*
amateur in our area with experience with trunked networks, and
he got that by working for the supplier. Only a few have test
equipment covering the band. Most hams don't have a clue. Even
shadow areas for normal repeaters routinely stump many hams.
There's no provision for an orderly handoff to another machine,
automatic *or* manual. And shadow zones are very common in our
rough terrain.

>> For most amateurs, the roles that they can fill *as amateurs*
>> in the emergency communications assistance role grow smaller
>> every year. To most agencies, we are just warm bodies who must
>> be taught to *unlearn* our amateur habits before we are useful
>> to the agency.

>

>Well, we are warm bodies...and I can think of one active use of
>amateurs locally where we have to form a corp much like John
>has described in the past for said agency....that being the
>California Dept of Forestry..when we go out and help during
>fire suppression efforts... but even then, while operating under
>the Incident Command System(that employed in Tenn, Ky?) we tend
>to operate our circuits in our own manner without any loss of
>efficiency.

We don't have that here. Most ARES members haven't even heard
of the ICS, much less know how to operate under it. Monitoring
real situations, I frequently hear, "CALLSIGN DE Callsign I'm
here, what do I do now? CALLSIGN DE Callsign." " Callsign DE CALLSIGN
Well I don't know. I'll see if I can find somebody to tell me
what they want. Callsign DE CALLSIGN." "Hey! It's raining over here,
anybody bring a raincoat?" "CALLSIGN THIS IS CALLSIGN THE OFFICIAL
ARES CONTROL STATION. STOP MAKING UNIDENTIFIED TRANSMISSIONS.
CALLSIGN." "Hey Joe, I got a spare raincoat. Where you at?" "CALLSIGN
CEASE TRANSMISSION CALLSIGN." And so on ad infinitum.

>> If we're serious about filling an emergency communications role,
>> we need to look carefully at the way we operate day to day as
>> amateurs and see how that relates to what a trained emergency
>> responder needs to be doing. We should be concentrating our
>> activities on developing cooperative communications systems

>> within the amateur ranks. We should be working to eliminate
>> as many practices based on competition and emphasis on differences
>> as possible. In short, we should concentrate on teamwork rather
>> than constantly battling to see who can collect the most postal
>> cards, give our callsigns the most frequently in a 3 minute
>> period, build empires to our egos, or other inane practices. We
>> need to be forward thinking, quick to adopt new technologies and
>> exploit them to their fullest. We need to be equally ruthless in
>> discarding obsolescent techniques and equipment or we will fall
>> increasingly behind agency practices and needs. That sounds more
>> like a description of the average computer geek than it does of
>> the stereotypical amateur radio operator doesn't it? I suspect
>> there's a lesson there.

>>

>> Gary

>

>Gary, I wouldn't argue the above. It seems that this mostly
>comes down to politics and dealing with various peoples personal
>ambitions in a structured way. The raw talent is probably
>hiding in there...you gotta go fish it out and organize it
>usefully and cooperatively.

>

>Any suggestions?

If I knew how, I'd be out doing it instead of here typing. :-(
Getting cooperation *before* the emergency is the hardest
job a ham can have.

Gary

--

Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

Date: 15 Sep 93 20:47:04 GMT

From: ogicse!emory!wa4mei!ke4zv!gary@network.ucsd.edu

To: info-hams@ucsd.edu

References <1993Sep14.135910.15580@mnemosyne.cs.du.edu>,

<1993Sep14.200600.1095@ke4zv.atl.ga.us>,

<1993Sep15.134932.595@mnemosyne.cs.du.edu>

Reply-To : gary@ke4zv.UUCP (Gary Coffman)

Subject : Re: There goes the rest of 20M

In article <1993Sep15.134932.595@mnemosyne.cs.du.edu> lkollar@nyx.cs.du.edu (Larry Kollar) writes:

>I wrote:

>>>Self-policing implies some power
>>>of enforcement, and we just don't have that.

>

>gary@ke4zv.atl.ga.us (Gary Coffman) responds:

>>That's not really what "self policing" means. The emphasis is on the
>>*self* part. What it means is you are supposed to police yourself in
>>your operation on the air. Some hams also "snitch" on others, or even
>>resort to vigilante action, but that's not what self policing means.

>

>Right on as usual, Gary. If all of hamdom were as knowledgeable and as
>reasonable, there would be no problem. :-)

>

>But getting back to reality, how do we deal with the problems we have?
>Personally, I try to be the best operator I can in spite of my inevitable
>mistakes and to avoid over-the-air controversy whenever possible. Perhaps
>our licensing classes should include a dose of good operating habits
>(repeater and otherwise) tailored to the local when necessary. Discussing
>politics & religion over the air (controversy!), for example, is something
>that can really get you zapped. It happened to a good friend of mine.

Well it depends on what you mean by "zapped". I generally do *not* avoid controversial topics on the air (anyone surprised?). But the most zap I usually experience is a minor flame war on the subject. That's expected, and not wholly unwelcome, where there's heat there is often light. I never get excited, I never get mad, I just coolly and rationally destroy my opponent's arguments. I've rarely experienced real harassment, such as deliberate jamming. In the rare cases when it has happened, I either reach over and turn up that big rheostat controlling power, or come in on the control channel and laugh and make fun of the poor jammer. :-) In persistent cases, there's always the DF gear.

Now there are degrees of "zap" I suppose. The most severe zap would be someone coming looking for me with a gun. That's happened, but not over amateur radio. I merely make sure I'm better armed, and a better shot. It doesn't hurt if you can run and duck fast too. :-)

What are our problems on the bands?

- 1) Rude and inconsiderate behavior. That's pretty much a reflection of society today. Manners are all but forgotten. The best I can offer is the admonition to get used to it. Shunning the persons with particularly bad manners, after telling them why privately, can often correct the situation.

- 2) Foul language. That's almost a ditto of above. Get used to it.

If you happen to be the control op of a repeater, you can try to bleep the offender, but it's rarely worth the trouble.

- 3) Deliberate jamming. This begins to get serious. In this case it's time to exhibit your DF skills and track the culprit down. If you can get help from the FCC here, good luck. Often a mano to mano confrontation is required. It often helps if you bring an angry crowd with you. (Muted muttering about getting a rope is always a useful background for a rational discussion of jamming technique.)
- 4) Threats of bodily harm. Take them for what they're worth, act accordingly. It never hurts to be well armed.
- 5) What else?

Gary

--

Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

Date: 15 Sep 93 22:52:50 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
To: info-hams@ucsd.edu

References <m9c3n8INNar@exodus.Eng.Sun.COM>, <277h5f\$5j1@bigguy.eng.ufl.edu>, <1993Sep15.174735.2013@ObjecTime.on.ca>
Reply-To : gary@ke4zv.UUCP (Gary Coffman)
Subject : Re: need expert info on nicads.

In article <1993Sep15.174735.2013@ObjecTime.on.ca> peter@ObjecTime.on.ca (Peter Epstein) writes:
>In article <277h5f\$5j1@bigguy.eng.ufl.edu>, thoman@helios.tcad.ee.ufl.edu (Greg Thoman) writes:
>|> In article <m9c3n8INNar@exodus.Eng.Sun.COM>, falk@peregrine.Eng.Sun.COM (Ed Falk) writes:
>|> |> 3) There is a memory effect, in which a nicad which is charged
>|> |> and discharged on a very consistent cycle will eventually reach
>|> |> a state where it can no longer be discharged below it's habitual
>|> |> discharge point. This effect is very slight, and was originally
>|> |> observed in satellites
>|>
>|> No, this effect is NON-EXISTENT under the circumstances and
>|> with the battery types you have mentioned.

>
>I had heard that there is a memory effect, but that it isn't exactly
>as described. If you pass the habitual discharge point when using
>(discharging the battery), you can expect a voltage reduction of about
>10% at that point. If you have enough cells so that the remaining
>voltage is enough to power the load, the memory effect is not important.
>If you're cutting it close with just enough cells to provide the necessary
>voltage, the memory effect can be important (meaning you should probably
>always discharge fully before charging). I assume our Tx and Rx packs
>have enough extra voltage to handle the memory effect. This could just be
>a myth, but I doubt it.

Yep, the official name for this condition is "voltage depression". The
amps are still in there, but some equipment will shut down because it
senses too low a voltage. So you never get to use the capacity. Doing
a deep discharge eliminates the depression point. But remember, deep
discharge of *packs* is dangerous because the weakest cell may reverse.
It's best to deep discharge individual cells. That way you can safely
go all the way down to zero volts.

Gary

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Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

End of Info-Hams Digest V93 #1100
